ATTAT & TRAF

Substitute for form 1449A/PTO (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

5

Sheet

U.S. Faterit and	Trademark Office. 0.3. DEFARTMENT OF GOMMERCE.
	Complete if Known
Application Number	10/074,679
Filing Date	February 11, 2002
First Named Inventor	MAYO et al.
Art Unit	1631
Examiner Name	Borin, Michael L.
Attorney Docket Number	A-71138-1/RFT/RMS/RMK

			U.S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
MB	A1	4,939,666	07-03-1990	Hardman	
7	A2	5,241,470	08-31-1993	Lee et al.	
	A3	5,265,030	11-23-1993	Skolnick et al.	
	A4	5,527,681	06-18-1996	Holmes	
	A5	5,878,373	03-02-1999	Cohen et al.	
	A6	6,188,965 B1	02-13-2001	Mayo et al.	
	A7	6,269,312 B1	07-31-2001	Mayo et al.	
	A8	6,403,312 B1	06-11-2002	Dahiyat et al.	
	A9	2001/0032052A1	10-18-2001	Mayo et al.	
•	A10	2001/0039480A1	11-08-2001	Mayo et al.	
	A11	2002/0004706A1	01-10-2002	Mayo et al.	
1	A12	2002/0048772A1	04-25-2002	Dahiyat et al.	
	A13	2002/0106694A1	08-08-2002	Mayo et al.	
	A14	2003/0049654A1	03-13-2003	Dahiyat et al.	
My	A15	2003/0130827A1	07-10-2003	Bentzien et al.	
	A16				
	A17				
	A18				
	A19				

	FOREIGN PATENT DOCUMENTS					
Examiner Initiats*	Cite No.	Foreign Patent Document Country Code ² Number ⁴ Kind Code ⁵ (if known)	Publication Oate MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T°
MS	B1	WO 95/22625 A1	08-24-1995	Affymax Technologies N.V.		
1	B2	WO 98/32845 A1	07-30-1998	Bioinvent International AB		
	B3	WO 98/47089 A1	10-22-1998	California Institute of Technology		
	B4	WO 00/23564 A2	04-27-2000	Xencor Inc.		
	B5	WO 00/68396 A2, A3	11-16-2000	Xencor Inc.		
	B6	WO 01/59066 A2, A3	08-16-2001	Xencor Inc.		
M	B7	WO 03/014325 A2	02-20-2003	Xencor		
	B8					
	B9					

Examiner Signature	Mark	Date Considered	Ø5/	loy

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

^{*}EXAMINER: Initial if reference considered, whether or not clauon is in conformance with MPEP 609. Draw line through clauon in not in conformance and not considered. Include copy of this form with next communication to applicant.

*Applicant's unique citation designation number (optional).

*See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

*Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

*For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

*Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.

16 if possible.

*Applicant is to place a check mark here if English Language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the ISSTO to process) are application. Coefficientistic covered by 35 LISC 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete.

USPTO to process) an application. Confidentiality governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

MAR 1	D 7/2	Substitute for form 1449A/PTO (Modified)		Complete if Known		
\setminus 0	\			Application Number	10/074,679	
	, gN	FORMATIO	N DISC	CLOSURE	Filing Date	February 11, 2002
MAR 1	P WW cgr	NFORMATION DISCLOSURE STATEMENT BY APPLICANT		PLICANT	First Named Inventor	MAYO et al.
					Art Unit	1631
A TOAT	EN PRINT	(use as many sh	eets as ne	cessary)	Examiner Name	Borin, Michael L.
	Sheet	2	of	5	Attorney Docket Number	A-71138-1/RFT/RMS/RMK

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Τ¢
My	C1	Benson et al., "Rational design of nascent metalloenzymes", Proc Natl Acad Sci USA, June 6, 2000, 97(12):6292-6297.	
	C2	Bolon et al., "Enzyme-like proteins by computational design", Proc Natl Acad Sci USA, December 4, 2001, 98(25):14274-14279.	
	СЗ	Borman, "Proteins to Order," Chemical and Engineering Newsletter, C&EN, October 6, 1997, pgs.9-10.	
	C4	Bowie, J.U., et al., "A Method to Identify Protein Sequences That Fold into a Known Three-Dimensional Structure", Science, 1991, 253:164-170.	
	C5	Bowie, J.U., et al., "Deciphering the Message in Protein Sequences: Tolerance to Amino Acid Substitutions", Science, March 1990, 247:1306-1310.	
	C6	Brenner and Berry, A., et al., "A quantitative methodology for the de novo design of proteins", Protein Sci., 1994, 3:1871-1882.	
	C7	Brooks et al., "CHARMM: A Program for Macromolecular Energy, Minimization, and Dynamics Calculations," J. of Computational Chemistry, 1983, 4(2):187-217.	r
	C8	Connolly, M.L., "Solvent-Accessible Surfaces of Proteins and Nucleic Acids", Science, August 19, 1983, 221(4612):709-713.	
	C9	Corey et al., "On the failure of de novo-designed peptides as biocatalysts", Proc Natl Acad Sci USA, October 1996, 93:11428-11434.	
	C10	Cornell et al., "A Second Generation Force Field for the Simulation of Proteins, Nucleic Acids, and Organic Molecules", J. Am. Chem. Soc., 1995, 117:5179-5197.	
	C11	Dahiyat et al., "De Novo Protein Design: Fully Automated Sequence Selection", Science, 1997, 278:82-87.	
	C12	Dahiyat et al., "Probing the Role of Specificity in Protein Design", Caltech Biology Annual Report, 1996, pp160-161.	
	C13	Dahiyat et al., "Protein Design Automation", Protein Science, 1996, 5:895-903.	
	C14	Dahiyat et al., "Protein design automation", Caltech Biology Annual Report, 1995, p172.	
	C15	Dahiyat et al., "Protein Design Automation," Meeting Abstract, Protein Science, 1995, vol. 4, Suppl. 2, p83.	
	C16	Dahiyat et al., "Protein Design Automation," Poster Sessions, Protein Science, 1996, vol.5, Suppl. 1, pp22-23.	
	C17	Dahiyat, B.I., et al., "Automated design of the surface positions of protein helices", Protein Science, 1997, 6:1333-1337.	-
	C18	Dahiyat, B.I., et al., "First Fully Automatic Design of a Protein Achieved by Caltech scientists", news press release, Oct. 1997.	
	C19	Dalal, S., et al., "Protein alchemy: Changing ß-sheet into a-helix", Nature Struc. Biol., July 1997, 4(7):548-552.	
	C20	DeGrado, W., "Proteins from Scratch", Science, 1997, 278:80-81.	
M	C21	Desjarlais et al., "New strategies in protein design", Current Opinion in Biotechnology, 1995, pp460-466.	

Examiner Signature	Ubn Date Considered 05	py
		7

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional).

See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

Better Office that issued the document, by the two-letter code (WIPO Standard ST.3).

For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.

Applicant is to place a check mark here if English Language Translation is attached.

Complete if Known Substitute for form 1449A/PTO (Modified) 10/074,679 Application Number MINORMATION DISCLOSURE February 11, 2002 Filing Date 5 2004STATEMENT BY APPLICANT MAR MAYO et al. First Named Inventor Art Unit 1631 (use as many sheets as necessary) **Examiner Name** Borin, Michael L. 5 A-71138-1/RFT/RMS/RMK 3 Attorney Docket Number Sheet of

	***	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
pw	C22	Desjarlais, J.R., et al., "De novo design of the hydrophobic cores of proteins", Protein Science, 1995, 4:2006-2018.	
	C23	Desmet et al., "Theoretical and Algorithmical Optimization of the Dead-End Elimination Theorem", Proceedings of the Pacific Symposium on Biocomputing '97, 1997, pp122-133.	
	C24	Desmet, J., et al., "The 'Dead End Elimination' Theorem: A New Approach to the Side-Chain Packing Protein", from "The Protein Folding Problem and Tertiary Structure Prediction", 1994, Ch.10:1-49.	
	Ç25	Desmet, J., et al., "The dead-end elimination theorem and its use in protein side-chain positioning", Nature, April 9, 1992, 356:539-542.	
	C26	Dunbrack Jr., R.L., et al., "Conformational analysis of the backbone-dependent rotamer preferences of protein sidechains", Struc. Biol., May 1994, 1(5):334-340.	
	C27	Eisenberg, D., et al., "Solvation energy in protein folding and binding", Nature, Jan. 1986, 319:199-203.	
	C28	Fechteler T, et al., "Prediction of Protein Three-dimensional Structures in Insertion and Deletion Regions: A Procedure for Searching Data Bases of Representative Protein Fragments Using Geometric Scoring Criteria", J Mol Biol., Oct 13, 1995, 253:114-31.	
	C29	Gallop et al., "Applications of Combinatorial Technologies to Drug Discovery. 1. Background and Peptide Combinatorial Libraries", Journal of Medicinal Chemistry, April 29, 1994, 37(9):1233-1251.	
	C30	Goldstein, R.F., "Efficient Rotamer Elimination Applied to Protein Side-Chains and Related Spin Glasses", Biophys. Jour., May 1994, 66:1335-1340.	
	C31	Gordon et al. "Energy functions for protein design", Curr. Opinion in Struct. Biol., 1999, 9:509-513.	
	C32	Harbury et al., "High-Resolution Protein Design with Backbone Freedom", Science, 282:1462-1467 (1998).	
	C33	Harbury et al., "Repacking protein cores with backbone freedom: Structure prediction for coiled coils", Proc. Natl. Acad. Sci. USA, 1995, 92:8408-8412.	
	C34	Hellinga, H.W., "Rational protein design: Combining theory and experiment", Proc. Natl. Acad. Scl, USA, Sep. 1997, 94:10015-10017.	
	C35	Hellinga, H.W., et al., "Construction of New Ligand Binding Site in Proteins of Known Structure I. Computer-aided Modeling of Sites with Pre-defined Geometry", J. Mol. Biol., 1991, 222:763-785.	
	C36	Hellinga, H.W., et al., "Optimal sequence selection in proteins of known structure by simulated evolution", Proc. Natl. Acad. Sci. USA, Jun. 1994, 91:5803-5807	
	C37	Holmes, "First-ever designer protein fits like a glove," New Scientist, Oct. 11, 1997, IPC Magazines Limited, p8.	
	C38	Hurley et al., "Design and Structural Analysis of Alternative Hydrophobic Core Packing Arrangements in Bacteriophage T4 Lysozyme", J. Mol. Biol., 1992, 224:1143-1159.	
	C39	Jones, D.T., "De novo protein design using pairwise potentials and a genetic algorithm", Protein Science, 1994, 3:567-574.	
	C40	Koehl et al., "De Novo Protein Design. I. In Search of Stability and Specificity," J. Mol. Biol., 1999, 293:1161-1181.	
	C41	Kono et al., "Energy Minimization Method Using Automata Network for Sequence and Side-Chain Conformation Prediction from Given Backbone Geometry", Proteins: Structure, Function, and Genetics, 1994, 19:244-255.	
W)	C42	Kortemme et al., "Design of a 20-Amino Acid, Three-Stranded ß-Sheet Protein", 1998, Science, 281:253-256.	

g	
Examiner	Date
	Considered
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.usplo.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English Language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, Ú.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449A/PTO Complete if Known (Modified) 10/074,679 Application Number NFORMATION DISCLOSURE Filing Date February 11, 2002 5 2004 MAR **ATEMENT BY APPLICANT** First Named Inventor MAYO et al. ERITA TU Art Unit 1631 (use as many sheets as necessary) Examiner Name Borin, Michael L. 5 A-71138-1/RFT/RMS/RMK Sheet 4 of Attorney Docket Number

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Τ'
My	C43	Lam, Kit S., "Application of combinatorial library methods in cancer research and drug discovery", Anti-Cancer Drug Design, 1997, 12:145-167.	
	C44	Lasters et al., "Enhanced dead-end elimination in the search for the global minimum energy conformation of a collection of protein side chains", 1995, Protein Engineering, 8(8): 815-822.	
	C45	Lasters, I., et al., "Dead-End Based Modeling Tools to Explore the Sequence Space That is Compatible with a Given Scaffold", Jour. of Protein Chem., July 1997, 16(5):449-452.	
	C46	Lazar et al., "De novo design of the hydrophobic core of ubiquitin", Protein Science, 1997, 6:1167-1178.	
	C47	Lee et al., "Accurate prediction of the stability and activity effects of site-directed mutagenesis on a protein core," Nature, 1991, 352:448-451.	
	C48	Lim et al., "The crystal structure of a mutant protein with altered but improved hydrophobic core packing", Proc Natl Acad Sci U S A, Jan 1994, 91(1):423-427.	
	C49	Malakauskas, S.M. and Mayo, S.L., "Design, structure and stability of a hyperthermophilic protein variant", Nat Struct Biol., Jun 1998, 5(6):470-475.	
	C50	Mayo et al., "DREIDING: A Generic Force Field for Molecular Simulations", J. Phys. Chem., 1990, 94:8897-8909.	
	C51	Minor Jr.; D.L., "Measurement of the ß-sheet-forming propensities of amino acids", Nature, Feb. 1994, 367:660-663.	
	C52	Munoz, V., et al., "Analysis of the effect of local interactions on protein stability", Folding & Design, Apr. 1996, 1(3):167-178.	
	C53	Munoz, V., et al., "Helix design, prediction and stability", Curr. Opin. in Biotech., Aug. 1995, 6:382-386.	
	C54	Munoz, V., et al., "Intrinsic Secondary Structure Propensities of the Amino Acids, Using Statistical f -? Matrices: Comparison with Experimental Scales", Proteins, 1994, 20:301-311.	
	C55	Pabo, C., "Designing proteins and peptides", Nature, Jan. 1983, 301:200.	
	C56	Padmanabhan, S., et al., "Relative helix-forming tendencies of nonpolar amino acids", Nature, Mar. 1990, 344:268-270.	
	C57	Pinto et al., "Construction of a catalytically active iron superoxide dismutase by rational protein design", Proc Natl Acad Sci USA, May 1997, 94:5562-5567.	
	C58	Ponder, J.W., et al., "Use of Packing Criteria in the Enumeration of Allowed Sequences for Different Structural Classes", release by Acad. Press Inc. (London) Ltd., 1987, pp.775-791.	
	C59	Rappé et al., "Charge Equilibration for Molecular Dynamics Simulations", J. Phys. Chem., 1991, 95:3358-3363.	
	C60	Regan, L., "Helix is a helix?", Proc. Natl. Acad. Sci. USA, Apr. 1997, 94:2796-2797.	
	C61	Smith, C.K., et al., "Guidelines for Protein Design: The Energetics of ß Sheet Side Chain Interactions", Science, Nov. 1995, 270:980-982.	
	C62	Stickle et al., "Hydrogen Bonding in Globular Proteins", Journal of Molecular Biology, 1992, 226:1143-1159.	
W	C63	Sun, S., et al., "Designing amino acid sequences to fold with good hydrophobic cores", Protein Eng., 1995, 8(12):1205-1213.	

Examiner Signature	Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional).

See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

The College of the training of the patent document, by the two-letter code (WIPO Standard ST.3).

For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.

It is possible.

Applicant is to place a check mark here if English Language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, inctuding gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Complete if Known Substitute for form 1449A/PTO (Modified) Application Number 10/074,679 FORMATION DISCLOSURE Filing Date February 11, 2002 ATEMENT BY APPLICANT First Named Inventor MAYO et al. Art Unit 1631 (use as many sheets as necessary) **Examiner Name** Borin, Michael L. 5 5 Attorney Docket Number A-71138-1/RFT/RMS/RMK of

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
MI	C64	Tuffery et al., "A New Approach to the Rapid Determination of Protein Side Chain Conformations", J. of Biomolecular Struct. & Dynamics, 1991, 8(6):1267-1289.	
	C65	van Gunsteren et al., "Prediction of the Activity and Stability Effects of Site-directed Mutagenesis on a Protein Core", J. Mol. Biol., 1992, 227:389-395.	
	C66	Villegas et al., "Stabilization of proteins by rational design of a-helix stability using helix/coil transition theory", Folding & Design, 1995, 1(1):29-34.	
	C67	Wallace AC, et al., "Derivation of 3D coordinate templates for searching structural databases: Application to Ser-His-Asp catalytic triads in the serine proteinases and lipases", Protein Sci., Jun 1996, 5(6):1001-13.	
	C68	Wesson et al., "Atomic solvation parameters applied to molecular dynamics of proteins in solution", Protein Science, 1992, 1:227-235.	
	C69	Wilson et al., "Computational Method for the Design of Enzymes with Altered Substrate Specificity", J. Mol. Biol., 1991, 220:495-506.	
m	C70	Wodak, S.J., et al., "Analytical approximation to the accessible surface area of proteins", Proc. Natl. Acad. Sci. USA, Apr. 1980, 77(4):1736-1740.	
	C71		
	C72		
	C73		
	C74		
	C75		
	C76		
	C77		

Examiner Signature	Mans	Date Considered	05/04
			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional).

See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

The Communication of the patent document, by the two-letter code (WIPO Standard ST.3).

For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.

It is possible.

Applicant is to place a check mark here if English Language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Sheet

Substitute for form 1449A/PTO C THANKMAN A (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of 1

U.S. Faterit and	Trademark Office, U.S. DEFARTMENT OF COMMERCE.
	Complete if Known
Application Number	10/074,679
Filing Date	February 11, 2002
First Named Inventor	MAYO et al.
Art Unit	1631
Examiner Name	Borin, Michael L.
Attorney Docket Number	A-71138-1/RFT/RMS/RMK

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	U.S. Patent Document Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
My	A1	6,708,120 B1	03-16-2004	Mayo et al.	
MY	A2	2004/0043429 A1	03-04-2004	Dahiyat et al.	
MS	A3	2004/0043430 A1	03-04-2004	Dahiyat et al.	
	A4				
	A5				
	A6				
	A7				

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Foreign Patent Document Country Code ² Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	ı
	B1					Г
	B2					
	В3					
	B4					
	B5		,			
	В6					
	B7					

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
NN	C1	KLEMBA, M., et al., "Novel metal-binding proteins by design", Natural Structural Biology, May 1995, 2 (5):368-373.	
	C2		
	СЗ		
	C4		T
	C5		T
	C6		T

Examiner Signature	Mans	Date Considered	05/04

including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English Language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending on the individual case. Any comments on